

WHAT IS CLAIMED IS:

1. An image processing apparatus for performing image processing on captured data of an image of a desired subject, comprising:

5 an image processing part; including:

 a buffer memory for data storage;

 an image processing unit for performing a predetermined process on said captured data to obtain image data, and writing said image data to said buffer memory; and

10 a compression unit for compressing said image data read from said buffer memory; and

 a storage unit provided outside said image processing part.

2. The image processing apparatus according to claim 1,

15 wherein said buffer memory includes a first buffer memory and a second buffer memory,

 said image processing apparatus further comprising:

 a control unit being operative in such a manner that while said image processing unit writes said image data either to said first buffer memory or to said second buffer memory, said compression unit selectively reads image data previously stored either in said first buffer memory or in said second buffer memory experiencing no writing of said image data by said image processing unit.

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3. The image processing apparatus according to claim 1,

25 wherein said buffer memory includes two buffer memories,

said image processing apparatus further comprising:

a control unit for reading and writing said image data using said two buffer memories as one continuous buffer memory,

5 wherein after said image data in predetermined amount is written to said continuous buffer memory, said image processing unit suspends writing until receipt of a control signal, and

wherein after said image data is read from said continuous buffer memory, said compression unit sends said control signal to said image processing unit.

10 4. The image processing apparatus according to claim 1, further comprising:

an image display processing unit for converting said image data into data for image display, said image data being written to said buffer memory by said image processing unit, whereby said data for image display is reproduced on a display device.

15 5. The image processing apparatus according to claim 4,

wherein said buffer memory includes a first buffer memory and a second buffer memory,

said image processing apparatus further comprising:

20 a control unit being operative in such a manner that while said image processing unit writes said image data either to said first buffer memory or to said second buffer memory, said image display processing unit selectively reads image data previously stored either in said first buffer memory or in said second buffer memory experiencing no writing of said image data by said image processing unit.

25 6. The image processing apparatus according to claim 4,

wherein said buffer memory includes two buffer memories,

said image processing apparatus further comprising:

a control unit for reading and writing said image data using said two buffer memories as one continuous buffer memory,

5 wherein after said image data in predetermined amount is written to said continuous buffer memory, said image processing unit suspends writing until receipt of a control signal, and

 wherein after said image data is read from said continuous buffer memory, said image display processing unit sends said control signal to said image processing unit.

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7. The image processing apparatus according to claim 4,

 wherein said buffer memory includes a first buffer memory and a second buffer memory, and

 wherein said image processing unit includes:

15 an output unit for performing a predetermined process on said captured data, and outputting the processed captured data as data for image display,

 said image processing apparatus further comprising:

 a control unit being operative in such a manner that while said image processing unit writes said data for image display either to said first buffer memory or to said second
20 buffer memory, said image display processing unit selectively reads data for image display previously stored either in said first buffer memory or in said second buffer memory experiencing no writing of said image data by said image processing unit.

8. The image processing apparatus according to claim 4,

25 wherein said buffer memory includes two buffer memories, and

wherein said image processing unit includes an output unit for performing a predetermined process on said captured data, and outputting the processed captured data as data for image display,

said image processing apparatus further comprising:

5 a control unit for reading and writing said image data using said two buffer memories as one continuous buffer memory,

wherein after said data for image display in predetermined amount is written to said continuous buffer memory, said image processing unit suspends writing until receipt of a control signal, and

10 wherein after said data for image display is read from said continuous buffer memory, said image display processing unit sends said control signal to said image processing unit.

9. The image processing apparatus according to claim 1, further comprising:

15 an image display processing unit for converting said image data into data for image display, said image data being written to said buffer memory by said image processing unit, whereby said data for image display is reproduced on an electronic viewfinder.

20 10. An image processing apparatus for performing image processing on captured data of an image of a desired subject, comprising:

a storage unit provided outside an image processing part, said storage unit storing said captured data; and

said image processing part, including:

25 an image processing unit for dividing said captured data stored in said storage

unit into two or more pieces of regional data in more than one column and in more than one row, performing a predetermined process on said two or more pieces of regional data for conversion into image data, and writing said image data to said storage unit, said two or more pieces of regional data being sequentially read from the first line and from the first column by means of DMA transmission; and

a compression unit for sequentially reading said two or more pieces of regional data written to said storage unit by said image processing unit, and compressing said two or more regional data.

11. An image processing apparatus for performing image processing on captured data of an image of a desired subject, comprising:

a storage unit provided outside an image processing part, said storage unit storing said captured data; and

said image processing part, including:

a buffer memory for storing image data;

an image processing unit for dividing said captured data stored in said storage unit into two or more pieces of regional data in more than one column and in more than one row, performing a predetermined process on said two or more pieces of regional data for conversion into image data, and writing said image data to said buffer memory, said two or more pieces of regional data being sequentially read from the first line and from the first column; and

a compression unit for sequentially reading said two or more pieces of regional data written to said buffer memory by said image processing unit, and compressing said two or more regional data.